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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,597	03/15/2004	Cory Allen Jackson	CTG 001.01	1788

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EXAMINER

HUSON, MONICA A

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,597

Applicant(s)

JACKSON ET AL.

Examiner

Monica A. Huson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 17-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 031504.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10 and 17-21, drawn to consolidated thermoplastic elastomer, classified in class 428, subclass various.
- II. Claims 11-16, drawn to a method of forming a consolidated PVDF elastomer product, classified in class 264, subclass 239.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the consolidated thermoplastic elastomer can be made by instead of heating the product for a sufficient time to displace all air from the PVDF foam, use vacuum with sufficient suction capability to remove all the air from the foam.
2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Mr. Allen Marcontell on July 1, 2005 a provisional election was made with traverse to prosecute the invention of Group II, claims 11-16 drawn to a method of forming a consolidated PVDF elastomer product. Affirmation of this election must be

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made by applicant in replying to this Office action. Claims 1-10 and 17-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dirks (U.S. Patent 3,944,704), in view of Guerin et al. (U.S. Patent 5,006,602), further in view of Kataoka (U.S. Patent 4,752,204). Regarding Claim 11, Dirks shows that it is known to carry out a method of forming a consolidated elastomer product comprising the steps of forming a product blank profile from foam (Column 2, lines 60-64); placing the product blank in a mold between platens of a heated molding press (Column 5, lines 49-53); volumetrically compressing the product blank between the platens while heating (Column 5, lines 49-53); and holding the compressed and heated product for a time sufficient to displace substantially all air from said

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foam (Column 3, lines 12-20; It is believed that if all the cells are completely filled with resin, there is no air present in the cells.). Dirks does not show compressing PVDF foam. Guerin et al., hereafter "Guerin," show that it is known to carry out a method of compressing PVDF foam while heating the foam to about 400°F (Column 3, lines 58-60; Column 4, lines 3-5; It is believed that a temperature difference of 50°C would not change adversely change the process conditions.). Dirks also does not show a specific compression ratio. Kataoka shows that it is known to carry out a compression process wherein a blank is volumetrically compressed by a ratio of 5:1 (Column 9, lines 35-36). Guerin and Dirks are combinable because they are concerned with a similar technical field, namely, methods of compressing foam material. Kataoka and Dirks are combinable because they are concerned with a similar technical field, namely, methods of compressing polymeric material. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Guerin's PVDF and Katoaka's compression ratio during Dirks' molding method in order to properly form a compressed PVDF article.

Regarding Claim 12, Dirks shows the process as claimed as discussed in the rejection of Claim 11 above, including a method wherein said product blank comprises a serially stacked plurality of foam sheets (Column 2, lines 64-37). Dirks does not show compressing PVDF foam. Guerin shows that it is known to carry out a method of compressing PVDF foam (Column 3, lines 58-60; Column 4, lines 3-5). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Guerin's PVDF foam as that in Dirks' disclosure in order to form an article having the desired characteristics of PVDF foam.

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Regarding Claim 13, Dirks shows the process as claimed as discussed in the rejection of Claim 11 above, but he does not show a specific molding time. Guerin shows that it is known to carry out a method of compressing foam for 3 minutes (Column 4, lines 5-6; It is believed that a difference of 2 minutes will not adversely affect the process conditions.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Guerin's time suggestion for Dirks' operating conditions in order to properly form a compressed PVDF article.

Regarding Claim 14, Dirks shows that it is known to carry out a method of manufacturing a sealing element for fluid system joints comprising the steps of forming a blank profile of said sealing element from foam (Column 2, lines 60-64); placing said blank between platens of a heated molding press (Column 5, lines 49-53); compressing said blank profile between the platens while heating (Column 5, lines 49-53); and holding said blank profile in a compressed and heated state for a time sufficient to displace substantially all air from said foam (Column 3, lines 12-20; It is believed that if all the cells are completely filled with resin, there is no air present in the cells.). Dirks does not show compressing PVDF foam. Guerin et al., hereafter "Guerin," show that it is known to carry out a method of compressing PVDF foam while heating the foam to about 400°F (Column 3, lines 58-60; Column 4, lines 3-5; It is believed that a temperature difference of 50°C would not change adversely change the process conditions.). Dirks also does not show a specific compression ratio. Kataoka shows that it is known to carry out a compression process wherein a blank is volumetrically compressed by a ratio of 5:1 (Column 9, lines 35-36). Guerin and Dirks are combinable because they are concerned with a

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similar technical field, namely, methods of compressing foam material. Kataoka and Dirks are combinable because they are concerned with a similar technical field, namely, methods of compressing polymeric material. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Guerin's PVDF and Katoaka's compression ratio during Dirks' molding method in order to properly form a compressed PVDF article.

Regarding Claim 15, Dirks shows the process as claimed as discussed in the rejection of Claim 14 above, including a method wherein said product blank comprises a serially stacked plurality of foam sheets (Column 2, lines 64-37). Dirks does not show compressing PVDF foam. Guerin shows that it is known to carry out a method of compressing PVDF foam (Column 3, lines 58-60; Column 4, lines 3-5). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Guerin's PVDF foam as that in Dirks' disclosure in order to form an article having the desired characteristics of PVDF foam.

Regarding Claim 16, Dirks shows the process as claimed as discussed in the rejection of Claim 14 above, but he does not show a specific molding time. Guerin shows that it is known to carry out a method of compressing foam for 3 minutes (Column 4, lines 5-6; It is believed that a difference of 2 minutes will not adversely affect the process conditions.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Guerin's time suggestion for Dirks' operating conditions in order to properly form a compressed PVDF article.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with regard to foam compression in general:

U.S. Patent 5,066,351 to Knoll

U.S. Patent 6,120,565 to Dix et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mah
September 19, 2005



**MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER**